

**REMARKS**

Claims 1-42 are pending in the application.

Claims 1-32 have been elected with traverse.

Claims 1-32 are rejected.

Claims 6, 21 and 32 have been amended.

Claims 43-55 are added.

**I. Elections/Restrictions**

Claims 1-42 are subject to a restriction and/or election requirement. During a telephone interview of May 10, 2002, applicant's representative, Mr. Henry J. Walsh elected with traverse to prosecute the invention of Group I, claims 1-32. This election is affirmed herein. Applicant traverses the restriction requirement by the following remarks:

Inventions Group I and Group II are related, because they are disclosed as capable of use together. For example, the method of claim 28 of Group I recites the step of creating a graphical image includes forming a grid made up cells. The step of using a grid to gain access in claim 33 of Group II can be used together with the step of claim 28.

The Office Action contends that Group I and Group II are unrelated, because "Group I, decrypting passwords or data using a key decoded from the grid in which the passwords are disguised; Group II, gaining access to passwords after recreating a particular pictorial representation in the grid." At 3. However, gaining access to passwords cannot be unrelated to decrypting passwords, because one without knowing how the passwords are disguised cannot gain access to the passwords. In other words, the particular pictorial representation in the grid of Group has to do with the key used in Group I.

In view of the above, Group I and Group II are related and withdrawal of the restriction is requested.

Applicant reserves the right to petition the restriction requirement if it is made final.

## **II. Priority**

The Office Action acknowledges the applicant's claim for domestic priority under 35 U.S.C. 120, but states that the Application No. 09/022,578 upon which priority is claimed fails to provide adequate support for claims 6-12 and 27-32. With respect to claim 12, it is submitted that claim 12 is fully supported by the Application No. 09/022,578, because claim 12 of the pending application is exactly the same claim 12 in the Application No. 09/022,578.

## **III. Oath/Declaration**

The Office Action objects the declaration, because the full name of the inventor "A. James Smith, Jr." has not been set forth. Enclosed please find a new executed declaration.

## **IV. Claim Objections**

With respect to claim 6, the Office Action objects the claim as informality, and suggests to delete the word "access". Applicant has added "to the data" prior to "comprising the steps of :", to provide antecedent basis for "said data access". It is respectfully submitted that support for this amendment may be found on page 2, lines 10-12.

Regarding claim 20, applicant has corrected the typographical error "constants" into "consonants".

## **V. 35 U.S.C. § 112 Rejections**

Claims 21-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 21, applicant has inserted, "to form numeric representations of the characters", after the phrase "a translator for translating the MasterCode into a numeric sequence", as suggested by the Examiner.

Claims 32 are rejected under 35 U.S.C. § 112, second paragraph for lacking antecedent basis. Claim 32 has been amended to add "image", after "said graphical" in line 2 and to change "said grid" into "a grid".

Applicant believes that above amendments have clarified the Examiner's area of concern.

#### **VI. Double Patenting**

The Office Action rejects claims 1 and 2, 3-5, 12-20, 21, 23, 25 and 26 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2, 7, 8, 10, 12-20, 21, 23, 25 and 26, respectively, of U.S. Patent No. 6,253,328 B1. The Examiner states that "Although the conflicting claims are not identical, they are not patentably distinct from each other."

Enclosed herewith is a Terminal Disclaimer which, it is submitted, overcomes the obviousness-type double patenting rejection.

#### **VII. 35 U.S.C. § 102 Rejections**

##### **(a) Jackson**

The Office Action rejected claims 6, 27 and 28 under 35 U.S.C. 102 (b) as being anticipated by U.S. Patent 5,793,871 issued to Jackson. (hereinafter "Jackson"). With respect to claim 6, the Examiner indicates that Jackson discloses each and every element recited in claim 6.

Claim 6 recites that "A method for securing data and for providing secure access to the data comprising the steps of: creating a graphical image; encrypting said data access using said graphical image as an encryption key, and providing the capability to utilize said key for gaining access to said data."

Jackson discloses a totally different technology. It is directed to a system of optical enciphering and deciphering with optical phase information for securely transmitting sensitive information over networks such as the Internet. See Jackson, col. 1, lines 12-15. The Examiner, referring to col. 6, lines 27-42 and lines 43-64, indicates that the readout beam is an equivalent of the graphical image as recited in claim 6. However, the readout beam is not the graphical image in the context of claim 6. It is only a beam for transmitting data and has nothing to do with data access. It is clearly that the readout beam is not used as an encryption key for encrypting data access and gaining access to the data. Instead, the encryption of data is achieved by the device such as the spatial light modulator (SLM) or the phase scrambling device 210. See col. 5, lines 58-63 and col. 6, lines 64-66.

Regarding claim 27, the Examiner states that "Jackson illustrates a method for securing data comprising: creating a readout beam in two dimensions (see column 6, lines 27-42 and figure 2A, item 207, E1); and encrypting the stripped data stream using the readout beam." However, the Examiner did not discuss the recitations in claim 27.

Claim 27 recites that "A method for securing data comprising the steps of: creating a graphical image; and masking said data using said graphical image as key." As discussed above, the readout beam is not the graphical image in the context of claimed invention. It is only a beam for transmitting data and has nothing to do with securing data. Further, Jackson does not mask the data by using the graphical image as key. Instead, "the data has been encrypted optically by the phase scrambling device 210." See col. 6, lines 64-66.

With respect to claim 28, the Examiner states that "Jackson further specifies forming a scramble phase component in x and y coordinates...selecting pixels from this component to form a factor." However, the Examiner does not discuss the recitations in claim 28. Claim 28 recites that

“said creating step include: forming a grid made up of rows and columns of cells; selecting cells from said grid to form said graphical image.” Jackson does not disclose the step of selecting cells to form said graphical image. The “factor” to which the Examiner refers has nothing to do with the graphical image. The factor is only used to express the imprinted beam 209.

In view of the above, claims 6, 27 and 28 are not anticipated by Jackson.

**(b) Cass et al.**

The Office Action rejected claims 6-11 and 27-32 under 35 U.S.C. 102 (b) as being anticipated by U.S. Patent 5,946, 414 issued to Cass et al. (hereinafter “Cass et al.”). With respect to claim 6, the Office Action indicates that Cass et al. discloses each and every element recited in claim 6. However, the Office Action fails to discuss the recitations in claim 6.

Claim 6 recites that “A method for securing data and for providing secure access to the data comprising the steps of: creating a graphical image; encrypting said data access using said graphical image as an encryption key, and providing the capability to utilize said key for gaining access to said data.”

Cass et al. discloses a totally different technology. It relates generally to a processor-based technique in the fields of color image processing. See Cass et al. at col. 1, lines 23-24. The Examiner, referring to col. 13, lines 50-57, indicates that each signal block is an equivalent of the graphical image as recited in claim 6. However, it is clear that a signal block has nothing to do with data access. It cannot be used as an encryption key for encrypting data access and gaining access to the data. On the contrary, the signals blocks are arranged according to the message m. See col. 13, lines 54-56. The Examiner, referring to column 29, lines 15-41 and figure 43, items 802, 820, 890, and 898, indicates this portion of Cass et al. discloses the step of providing the capability to utilize said key for gaining access to said data. However, this portion of Cass et al. only discusses the

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alignment of the signal cells. See col. 29, lines 40-41. It has nothing to do with utilizing the graphical image for gaining access to data.

Claims 7-11, by their dependence on claim 6, directly or indirectly, are allowable. Further, these claims are patentable for containing other distinct features. For example, claim 8 recites selecting a particular MasterGrid to be associated with the encryption key and storing the selected MasterGrid for later access as part of the encrypted access to said data. The cited part of Cass et al. fails to disclose these recitations. Regarding claim 9, the Office Action fails to discuss choosing a pathway thru said selected MasterGrid and encoding the chosen pathway as a grid reference.

With respect to claim 27, the Examiner, referring to col. 13, lines 50-57, states that "Cass et al. show a method for securing data comprising: defining signal blocks... and encrypting a message m with the signal blocks".

Claim 27 recites that "A method for securing data comprising the steps of: creating a graphical image; and masking said data using said graphical image as key".

Briefly, an aspect of claim 27 is directed to securing access to data by creating a graphical image, and encrypting data using the graphical image as an encryption key to control the access. See originally submitted specification on page 3, lines 20-22. As discussed above, the signal blocks of Cass cannot be used as a key for masking data because the signals blocks are arranged according to the message m. See col. 13, lines 54-56.

Claims 28-32, by their dependence on claims 27, directly or indirectly, are allowable. Furthermore, these claims are patentable for containing other distinct features. For example, claim 29 recites that the masking step of using said graphical image to establish a relationship between said data and other typographical symbols and replacing said data with said other

typographical symbols to mask said data. The portion of Cass cited by the Office Action fails to discuss these features.

In view of the above, claims 6-11 and 27-32 are not anticipated by Jackson.

### **VIII. Allowed Subject Matter**

The Office Action states that claims 1-5, 12-20, 21, 23, 25 and 26 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection, set forth in the Office Action. Applicant thanks the Examiner for allowance of these claims.

A terminal disclaimer is submitted herewith. Therefore, claims are believed to be patentable.

Claims 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowed if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph and either by amendment in independent form or by terminal disclaimer. Applicant thanks the Examiner for the indication of allowance for claims 22 and 24. However, applicant, at this stage, declines to rewrite these claims into an independent form. Claims 22 and 24 are believed to be patentable by their dependence on claim 21.

In the statement of reasons for the indication of allowable subject matter, the Office Action states that independent claims 1, 12 and 21 recite the feature of creating actual words from a character sequence. Although applicant appreciates the allowance of these claims, applicant disagrees the statement of reasons for the indication of allowable subject matter. It is respectfully submitted that the distinct features of claimed invention are set forth in the recitations of claims 1, 12 and 21, respectively.



**IVV. New Claims**

Claims 43-55 are added. Support of the new claims can be found, for example, on pages 22-25 of the specification. Applicant believes that they are patentable.

**VV. Summary**

Having fully addressed the Examiner's objections and rejections, it is believed that in view of the preceding remarks, this entire application stands in a condition for allowance. If, however, the Examiner is of the opinion that such action cannot be taken, he is invited to contact the applicant's attorney at the number and address below in order that any outstanding issues may be resolved without the necessity of issuing a further Action. An early and favorable response is earnestly solicited.

Please address all future correspondence to Intellectual Property Docket Administrator, Gibbons, Del Deo, Dolan, Griffinger & Vecchione, One Riverfront Plaza, Newark, NJ 07102-5497. Telephone calls should be made to Vincent E. McGeary at (973) 596-4837 or (973) 596-4500.

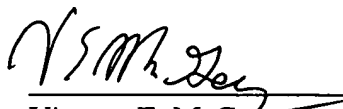




**VVI. Fees**

If any additional fees are due in respect to this amendment, please also charge them to  
Deposit Account No. 03-3839.

Respectfully submitted,

  
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**Version With Markings to Show Changes Made**

**In the Claims:**

Please amend claims 6, 21 and 32 as the following:

6. (Amended) A method for securing data and for providing secure access to the data comprising the steps of:

creating a graphical image;

encrypting said data access using said graphical image as an encryption key, and

providing the capability to utilize said key for gaining access to said data.

21. (Amended) A device for securing passwords and personal identification numbers comprising:

a generator for creating a MasterCode having a subset of characters randomly drawn from a character set which includes numbers, symbols and alphabet characters;

means for embedding the MasterCode in a MasterGrid;

a translator for translating the MasterCode into a numeric sequence to form numeric representations of the characters; and

assigning the numeric representations to the character sequence of passwords which may be given to the user, generated by the process or chosen by him.

32. (Amended) The method of claim 31 wherein the relationship of the data to the other typographical symbols includes tracing out said graphical image as a pattern in sequence and placing typographical symbols from said data in cells of [said] a grid corresponding to the graphical image.